

## Further Records of the Carpentarian Rock-rat *Zyomys palatalis* from the Gulf Region of the Northern Territory

In a recent review of the rat genus *Zyomys*, Kitchener (1989) described a new species, *Z. palatalis*, from the Gulf region of the Northern Territory. This description was based on the only three specimens known (one adult and two juveniles), collected in 1987 and 1988 from sandstone monsoon rainforest vegetation at Echo Gorge (17°12'S, 137°41'E) in Wollgorang Station, during a detailed wildlife survey of the NT Gulf district by the Conservation Commission of the Northern Territory. To date these are the only published records of this species, and concern about its conservation status has been expressed (e.g. Australasian Rodent Specialist Group 1992 listed the species as of Indeterminate status), especially as a hot fire destroyed much of the habitat in Echo Gorge after the initial collecting (K. Johnson pers. comm.).

During 1990 we surveyed mammals in 50 patches of monsoon rainforests across the NT (Menkhorst & Woinarski 1992), including several patches in the Gulf region. On 3-6 June 1990 we trapped a total of 14 individuals of *Z. palatalis* at two monsoon rainforest patches in a sandstone gorge at the headwaters of McDermotts Creek (17°25'S, 137°48'E), about 30 km SSE of the type locality. Two specimens were collected, and their identity confirmed by D. Kitchener (WA Museum).

Habitat at our capture sites was dry rainforest thicket (including the trees and shrubs *Gyrocarpus americanus*, *Celtis phillippinensis*, *Pouteria sericea*, *Terminalia volucris*, *Diospyros humilis*, *Ficus leucotricha*, *Ficus opposita*, *Antidesma parvifolium*, *Breynia cernua*, *Croton habrophyllus*, *Exocarpos latifolius* and *Flueggea virosa*, and the vine *Opilia amentacea*) growing around escarpment, similar to the habitat given for the type locality. Canopy height was 5-6 m, and canopy cover, 50-70%. Rock cover was greater than 95%, and there was less than 5% cover of tussock grasses. The two patches were 1 and 6 ha in area, and separated by about 500 m. We also trapped simultaneously in surrounding savanna woodland (dominated by *Eucalyptus brevifolia*), open forest (dominated by *E. papuana*), and tall (15 m) rainforest on a spring c.1 km downstream of the thickets, without catching *Z. palatalis*. The common Rock-rat *Zyomys argurus* was captured in these three habitats, and also in one of the two thickets.

Without further survey work in the Gulf region, it is impossible to define the conservation status of *Z. palatalis*. We currently know too little of its distribution, abundance and relationship to fire or grazing. As with its close relatives *Z. woodwardi* and *Z. maini*, *Z. palatalis* would appear to be associated with monsoon rainforests of sandstone escarpments, which provide the fleshy fruits and large seeds on which this group depends (Begg & Dunlop 1985). Many of these habitats

are being degraded in the Gulf region by changed fire regimes and the effects of grazing by cattle and feral stock (Holmes 1990; Russell-Smith & Bowman 1992).

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